

1. (Currently Amended) A method for provisioning logical circuits for intermittent use in a data network, the method comprising:
 - receiving at least one customer order for routing data in the data network for a time period;
 - provisioning at least one logical circuit in the data network for routing the customer data during the time period, wherein provisioning the at least one logical circuit comprises, without manual intervention, provisioning the at least one logical circuit through a first local access and transport area, a second local access and transport area, and an inter-exchange carrier, and wherein the at least one logical circuit includes first variable communication paths to route the data through the first local access and transport area in which the first variable communication paths automatically reroute from a first set of switches of the first local access and transport area to a second set of switches of the first local access and transport area while maintaining the at least one logical circuit, second variable communication paths to route the data through the second local access and transport area, and fixed communication paths to route the data between the first local access and transport area, the second local access and transport area, and the inter-exchange carrier;
 - adding the at least one logical circuit to a deletion batch; and
 - disconnecting the at least one logical circuit at the end of the time period.
2. (Previously Presented) The method of claim 1, wherein provisioning the at least one logical circuit comprises provisioning the at least one logical circuit prior to the start of the time period.

3. (Previously Presented) The method of claim 2, wherein provisioning the at least one logical circuit prior to the start of the time period comprises:

determining a maintenance window prior to the start of the time period; and
provisioning the at least one logical circuit during the maintenance window.

4. (Previously Presented) The method of claim 1, wherein disconnecting the at least one logical circuit at the end of the time period comprises disconnecting the at least one logical circuit following the end of the time period.

5. (Previously Presented) The method of claim 4, wherein disconnecting the at least one logical circuit following the end of the time period comprises:

determining a maintenance window following the end of the time period; and
disconnecting the at least one logical circuit during the maintenance window.

6. (Previously Presented) The method of claim 1, further comprising generating trap data for the at least one logical circuit during the time period, wherein the trap data comprises utilization statistics for the at least one logical circuit.

7. (Previously Presented) The method of claim 6, wherein the utilization statistics comprise the percent utilization of the at least one logical circuit during the time period.

8. (Previously Presented) The method of claim 1, wherein the customer order comprises a quality of service parameter for the at least one logical circuit.

9. (Original) The method of claim 8, wherein the quality of service parameter comprises at least one of:

an unspecified bit rate;
a variable bit rate; and
a committed bit rate.

10. (Original) The method of claim 1, wherein the at least one logical circuit is a permanent virtual circuit.

11. (Original) The method of claim 1, wherein the at least one logical circuit is a switched virtual circuit.

12. (Not Presented)

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) A system for provisioning logical circuits for intermittent use in a data network, the system comprising:

at least one network device to establish a communications path for at least one logical circuit in the data network; and

a network management module to:

receive at least one customer order for routing data in the data network during a time period;

provision the at least one logical circuit for routing the customer data during the time period, wherein provisioning the at least one logical circuit comprises, without manual intervention, provisioning the at least one logical circuit through a first local access and transport area, a second local access and transport area, and an inter-exchange carrier, and wherein the at least one logical circuit includes first variable communication paths to route the data through the first local access and transport area in which the first variable communication paths automatically reroute from a first set of switches of the first local access and transport area to a second set of switches of the first local access and transport area while maintaining the at least one logical circuit, second variable communication paths to route the data through the second

local access and transport area, and fixed communication paths to route the data between the first local access and transport area, the second local access and transport area, and the inter-exchange carrier;

add the at least one logical circuit to a deletion batch; and

disconnect the at least one logical circuit following the end of the time period.

16. (Previously Presented) The system of claim 15, wherein the network management module, in provisioning the at least one logical circuit, is operative to provision the at least one logical circuit prior to the start of the time period.

17. (Previously Presented) The system of claim 16, wherein the network management module, in provisioning the at least one logical circuit prior to the start of the time period, is operative to:

determine a maintenance window prior to the start of the time period; and
provision the at least one logical circuit during the maintenance window.

18. (Previously Presented) The system of claim 15, wherein the network management module, in disconnecting the at least one logical circuit following the end of the time period, is operative to:

determine a maintenance window following the end of the time period; and
disconnect the at least one logical circuit during the maintenance window.

19. (Previously Presented) The system of claim 15, further comprising a logical element module in communication with the at least one network device and the network management module, the logical element module to receive trap data generated by the at least one network device, wherein the trap data comprises a percent utilization of the at least one logical circuit during the time period.

20. (Original) The system of claim 15, wherein the customer order comprises a quality of service parameter for the logical circuit.

21. (Previously Presented) The system of claim 20, wherein the quality of service parameter comprises at least one of:

an unspecified bit rate;

a variable bit rate; and

a committed bit rate.

22. (Original) The system of claim 15, wherein the at least one logical circuit is a permanent virtual circuit.

23. (Original) The system of claim 15, wherein the at least one logical circuit is a switched virtual circuit.

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) A method for provisioning logical circuits for routing logical circuit data in a data network during a time period, the method comprising:

receiving at least one customer order for routing the logical data in the data network during the time period;

determining a maintenance window prior to the start of the time period;

provisioning the at least one logical circuit during the maintenance window, wherein provisioning the at least one logical circuit comprises, without manual intervention, provisioning the at least one logical circuit through a first local access and transport area, a second local access and transport area, and an inter-exchange carrier, and wherein the at least one logical circuit includes first variable communication paths to route the data through the first local access and transport area in which the first variable communication paths automatically reroute from a first set

of switches of the first local access and transport area to a second set of switches of the first local access and transport area while maintaining the at least one logical circuit, second variable communication paths to route the data through the second local access and transport area, and fixed communication paths to route the data between the first local access and transport area, the second local access and transport area, and the inter-exchange carrier;

determining a maintenance window following the end of the time period; and
disconnecting the at least one logical circuit during the maintenance window.

27. (Previously Presented) The method of claim 1, further comprising:

receiving a second customer order for routing second data in the data network for a second time period, wherein the at least one customer order is received at a first time of receipt and the second customer order is received at a second time of receipt;

selecting a first maintenance window to provision the at least one logical circuit based on the first time of receipt being within a first time of receipt range corresponding to the first maintenance window;

when the second time of receipt corresponding to the second customer order is within the first time of receipt range, selecting the first maintenance window to provision a second logical circuit corresponding to the second customer order; and

when the second time of receipt corresponding to the second customer order is not within the first time of receipt range, selecting a second maintenance window to provision the second logical circuit.

28. (Previously Presented) The method of claim 27, wherein the first maintenance window occurs during a time range during which a plurality of logical connections assigned to the first maintenance window are provisioned based on customer orders corresponding to the plurality of logical connections having been received during the first time of receipt range.

29. (Previously Presented) The system of claim 15, wherein the network management module is further to:

receive a second customer order for routing second data in the data network for a second time period, wherein the at least one customer order is received at a first time of receipt and the second customer order is received at a second time of receipt;

select a first maintenance window to provision the at least one logical circuit based on the first time of receipt being within a first time of receipt range corresponding to the first maintenance window;

when the second time of receipt corresponding to the second customer order is within the first time of receipt range, select the first maintenance window to provision a second logical circuit corresponding to the second customer order; and

when the second time of receipt corresponding to the second customer order is not within the first time of receipt range, select a second maintenance window to provision the second logical circuit.

30. (Previously Presented) The system of claim 29, wherein the first maintenance window occurs during a time range during which a plurality of logical connections assigned to the first maintenance window are provisioned based on customer orders corresponding to the plurality of logical connections having been received during the first time of receipt range.

31. (Previously Presented) The method of claim 26, further comprising:

receiving a second customer order for routing second data in the data network for a second time period, wherein the at least one customer order is received at a first time of receipt and the second customer order is received at a second time of receipt;

selecting a first maintenance window to provision the at least one logical circuit based on the first time of receipt being within a first time of receipt range corresponding to the first maintenance window;

when the second time of receipt corresponding to the second customer order is within the first time of receipt range, selecting the first maintenance window to provision a second logical circuit corresponding to the second customer order; and

when the second time of receipt corresponding to the second customer order is not within the first time of receipt range, selecting a second maintenance window to provision the second logical circuit.

32. (Previously Presented) The method of claim 31, wherein the first maintenance window occurs during a time range during which a plurality of logical connections assigned to the first maintenance window are provisioned based on customer orders corresponding to the plurality of logical connections having been received during the first time of receipt range.